ASSIGNMENT - 03

BY,

ROCHIT R

727822TUAM045

REACT

This presentation is about the usage of class in :

- Object ,
- String ,
- Boolean ,
- Array

Object:

```
import React, { useState } from 'react';

class ObjectComponent extends React.Component {
  constructor(props) {
    super(props);
    this.state = {
      user: {
        Name: 'Rochit R',
        age: 19,
      },
    };

    // Binding the handleInputChange method to the current instance
    this.handleInputChange = this.handleInputChange.bind(this);
  }
```

```
// Event handler to update the object state based on user input
  handleInputChange(event) {
    const { name, value } = event.target;

    this.setState((prevState) => ({
      user: {
        ...prevState.user,
        [name]: value,
      },
    }));
  }

  render() {
    const { user } = this.state;

    return (
      <div>
        <label>
           Name:
          <input
            type="text"
            name="Name"
            value={user.Name}
            onChange={this.handleInputChange}
          />
        </label>
        <br />
```

```
<label>
          Age:
          <input
            type="number"
            name="age"
            value={user.age}
            onChange={this.handleInputChange}
          />
        </label>
        <br />
        <div>
          <p>User Information:</p>
          <p>First Name: {user.firstName}</p>
          <p>Last Name: {user.lastName}</p>
          <p>Age: {user.age}</p>
        </div>
      </div>
    );
  }
}

export default ObjectComponent;
```

String:

```
import React, { useState } from 'react';

class StringComponent extends React.Component {
  constructor(props) {
    super(props);
    this.state = {
      stringValue: 'Initial Value',
    };
    this.handleInputChange = this.handleInputChange.bind(this);
  }
  handleInputChange(event) {
    this.setState({
      stringValue: event.target.value,
    });
  }
```

```
render() {
    return (
      <div>
        <label>
          Input String:
          <input
            type="text"
            value={this.state.stringValue}
            onChange={this.handleInputChange}
          />
        </label>
        <p>Current String Value: {this.state.stringValue}</p>
      </div>
    );
  }
}

export default StringComponent;
```

Boolean

```
import React, { useState } from 'react';

class BooleanComponent extends React.Component {
  constructor(props) {
    super(props);
    this.state = {
      isToggleOn: false,
    };
    this.handleClick = this.handleClick.bind(this);
  }

  handleClick() {
    this.setState((prevState) => ({
      isToggleOn: !prevState.isToggleOn,
    }));
  }
```

```
 render() {
    return (
      <div>
        <p>Toggle State: {this.state.isToggleOn ? 'On' :
'Off'}</p>
        <button onClick={this.handleClick}>
          {this.state.isToggleOn ? 'Batman' : 'Joker'}
        </button>
      </div>
    );
  }
}

export default BooleanComponent;
```

Array

```
import React, { useState } from 'react';

class ArrayComponent extends React.Component {
  constructor(props) {
    super(props);
    this.state = {
      items: ['Item 1', 'Item 2', 'Item 3'],
      newItem: '',
    };
    this.handleInputChange = this.handleInputChange.bind(this);
    this.handleAddItem = this.handleAddItem.bind(this);
  }
  handleInputChange(event) {
    this.setState({
      newItem: event.target.value,
    });
  }
```

```
handleAddItem() {
    this.setState((prevState) => ({
      items: [...prevState.items, prevState.newItem],
      newItem: '',
    }));
  }
 render() {
    const { items, newItem } = this.state;

    return (
      <div>
        <ul>
          {items.map((item, index) => (
            <li key={index}>{item}</li>
          ))}
        </ul>
        <label>
          New Item:
```

```
<input
              type="text"
              value={newItem}
              onChange={this.handleInputChange}
            />
          </label>
 <button onClick={this.handleAddItem}>Add Item</button>
      </div>
    );
  }
}

export default ArrayComponent;
```


Thank you